confinement region being arranged to have the workpiece carried therein; the plasma confinement region inlet and outlet being arranged for causing gas flowing through the inlet to flow into the substantial amount of plasma to flow from the region into the remainder of the chamber, a sensor for pressure in the region, and a regulator for pressure in the region.

53. (NEWLY ADDED) The apparatus of claim 52 and arrangement further including a feedback arrangement for controlling the pressure in the region, the feedback arrangement including the pressure and sensor regulator.

54. (NEWLY ADDED) The apparatus of claim 53 wherein the region includes louvers arranged for (a) enabling the gas to flow in a space between the louvers and thence to the outlet and (b) substantially preventing the plasma from flowing in the space and to the remainder of the chamber.

55. (NEWLY ADDED) The apparatus of claim 54 wherein the pressure regulator includes a drive for varying space between the louvers.

56. (NEWLY ADDED) The apparatus of claim 52 wherein the region includes louvers arranged for (a) enabling the gas to flow in space between the louvers and thence to the outlet and (b) substantially preventing the plasma from flowing in the space and to the remainder of the chamber.

57. (NEWLY ADDED) The apparatus of claim 56 wherein the wall arrangement and louvers are both at the same reference potential.

58. (NEWLY ADDED) The apparatus of claim 56 wherein the wall arrangement is at a reference potential and the louvers float electrically.

59. (NEWLY ADDED) The apparatus of claim 59 wherein the chamber includes (a) a reactive impedance element for electrical coupling with gas in the chamber and for connection to a first, relatively high frequency RF plasma excitation source and (b) an electrode for carrying the workpiece for electrical coupling with gas in the chamber and for connection to a second, relatively low frequency RF bias source; the reactive impedance being included in the excitation arrangement.

60. (NEWLY ADDED) The apparatus of claim 59 further including a filter arrangement connected to the reactive impedance element and the electrode, the filter arrangement being such that current at the second relatively low frequency can flow from the electrode to the reactive impedance element without being substantially coupled to the first, relatively high frequency RF source and current at the first, relatively high frequency that can flow from the first, relatively high frequency RF source is substantially incapable of flowing to the electrode and to the second, relatively low frequency RF source.

61. (NEWLY ADDED) The apparatus of claim 60 wherein the chamber wall is at the reference potential.

62. (NEWLY ADDED) The apparatus of claim 61 wherein the confinement region is bounded by louvers at the reference potential.

63. (NEWLY ADDED) The apparatus of claim 61 wherein the confinement region is bounded by louvers that float electrically.

64. (NEWLY ADDED) A method of processing a workpiece with a plasma in a vacuum chamber having a wall arrangement comprising flowing gas into the chamber, withdrawing gas from the chamber via an outlet arrangement, exciting the gas into a plasma, confining the plasma to a confinement region in the chamber, the confinement region having a boundary that is removed from the wall arrangement, flowing gas while preventing the substantial flow of plasma from the confinement region to the outlet arrangement, measuring pressure in the confinement region, and controlling pressure in the confinement region in response to the measured pressure.

65. (NEWLY ADDED) The method of claim 64 wherein the pressure is controlled by varying the spacing between louvers at the confinement region boundary.